

SYLLABUS
INTRO ANALYSIS & TOPOLOGY (math 381.1) FALL 2022

INSTRUCTOR:	Dr. Krzysztof Chris Ciesielski
OFFICE HOURS:	T & Th 2:30-3:00pm; MWF :1:00-1:40pm E-mail is also a good way to get in touch with me
OFFICE:	308G Armstrong Hall
CLASS MEETING TIMES:	T & Th 1:00-2:15pm
CLASS MEETING PLACE:	119 Armstrong Hall
WEB PAGE, E-MAIL:	www.math.wvu.edu/~kcies KCies@math.wvu.edu
TEXT:	Topology: Point-Set and Geometric, by Paul L. Shick
TENTATIVE GRADING SCHEME:	Homework, Quizzes, and class participation 25% Tests 1, 2, and 3, each 15% 45% Comprehensive Final Test 30%
GRADING SCALE:	A 90-100% B 80-89% C 70-79% D 60-69% F below 60%

Course Goals: 1) Students will learn proof-writing skills, 2) Students will strengthen their problem-solving skills, and 3) During the course of the semester students will learn and understand the basic concepts of topology (i.e., topological spaces, continuity, connectedness, compactness, and metric spaces).

Examinations: There will be a total of three one-hour exams and a comprehensive final. The final exam will be on Friday, December 16, 11:00am-1pm, according to WVU Final Examination Schedule. (This may be changed, if we all agree.) Each exam will be graded on a 100 points basis and rescaled to 15% or 30%, according to the grading schema above. Make-up examinations will be given only for very **serious and unavoidable** conflicts, and *only if* your request to present a make-up examination is approved by your instructor **in advance**. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided.

Homework Grade: Homework is a *very important* part of this class. To ensure that students are completing their homework, homework will be assigned regularly, and collected approximately once a week. The lowest homework score assignment (or possible two such scores) will be dropped from your overall homework grade. This includes the missing homework(s). Homework will need to be turned in during class on the day that it is due or **prior to the due date** (e-mailing it is encouraged); otherwise the homework will not be accepted. Homework should be written up **with great care**. Illegible homework will be given a zero for that homework assignment. In addition, you should submit homework that shows *all* steps that are needed to solve the problem. **Submitting solutions/proofs with missing steps/explanations will not be acceptable.** You will find that well written solutions/proofs will only benefit you when studying for the exams. The homework for the course will be worth 15-20% of your final grade.

Attendance: Attendance is important for your success in the course. Attendance will be taken regularly and may be used as part of your class participation.

Quizzes: Quizzes will be given regularly and will usually consist of no more than 2 problems from recently covered material. In addition, it may also contain some questions to state a definition, a theorem, or some fact that indicates that you have read previously assigned reading assignment. The lowest quiz score (or possible two such scores) will be dropped from your overall quizzes grade. This includes the missing quizzes. You will need to be present on the day that the quizzes are given or get advance approval from the instructor to take the quiz at a different time and the reason for missing the quiz should be a serious and an unavoidable conflict. If this condition is not satisfied, it is understood that the opportunity to make up the quiz is voided.

Reading Assignments: When studying higher level mathematics, it is very important for students to read the textbook. The textbook will help students understand the course material and will enhance the time that students participate in class. The instructor also wants students to spend time reading the textbook so that more time can be spent during class on active participation exercises.

Suggestions for Success: This class will be unlike other mathematics courses (Calculus I, Calculus II, and Differential Equations) that you have taken previously and an extension of its prerequisite, math 283: Introduction to Concepts of Mathematics. It will require you to construct logically arguments establishing a variety of statements. This will require students articulate their arguments on paper in a clearly and concisely. To be very successful in this class, I would recommend:

- 1) That students attend all classes. If you must miss the class for any reasons, then be sure to ask a classmate for notes, as your fellow classmates questions to get back up to speed, and don't hesitate to ask the instructor for guidance.
- 2) That students read the textbook before and after a topic is covered. Reading the textbook before a topic is covered will help you to gain a better understanding of the lecture on that topic. Reading the textbook after the lecture on a topic will reinforce the lecture, help you gain further understanding of the topic, and provide you with more examples and explanations.
- 3) That students work on problems immediately after attending the lecture. The material is fresh in your mind right after the lecture and so you will build on that if you work on the material soon after you have heard the lecture. Furthermore, you will begin building a foundation that you can use as you work problems later.
- 4) To visit your instructor's office hours when you are needing help or guidance. Your instructor is more than happy to provide guidance and if you cannot come during office hours then do not hesitate to schedule an appointment. If you have questions during class, then feel free to interrupt the instructor.
- 5) That students work hard on homework. Even after you have finished homework over a particular section, it is very profitable to work other problems. Making sure that concepts are understood fully is the key to doing well in the class. Study in groups might be a good option to think about too! (However, *do not share* written homework solutions with your classmates. The write-up must be your own!)